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10/579,395	05/15/2006	Jordi Tormo i Blasco	5000-0168PUS1	8160
2392 7590 904187008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER	
			MOORE, SUSANNA	
			ART UNIT	PAPER NUMBER
			1624	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Application No. Applicant(s) 10/579,395 TORMO I BLASCO ET AL Office Action Summary Examiner Art Unit SUSANNA MOORE 1624 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) _____ is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 1-20 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date 5/15/06

Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Notice of Draftsperson's Patent Drawing Review (PTO-948)

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

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DETAILED ACTION

Claim Objections

Claims 14-16 are objected to because of the following informalities: these claims depend from a rejected base claim. Furthermore, it is improper for a compound claims to depend from a method of "use" claim. Appropriate correction is required.

Claims 12, 17, 18 and 20 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 12 is dependent of claim 2. However, claim 2 does not have a formula I. Furthermore, claims 17, 18 and 20 state the formula I according to claim 2.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "heterocycle" is vague and ambiguous. "Heterocycle" is the name of a

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compound whose valency is complete. It cannot be used as a substituent because it has no free valency. Thus, please replace with the correct substituent name.

Regarding claims 1-20, the term "heterocyclyl is vague. The Specification on page 8 includes a list of groups, however, the list uses open-ended language, e.g. "for example." What is not included? The claims are too broad in that there is no proper support in the Specification for "heterocyclic groups." In re Wievins. 179 USPO 421.

The phrase, "for their part" on page 3, line 10, is vague. The Examiner suggests the removal of this phrase.

Claim 11 recites the limitation "I.1, I.2 or I.3" in claim 11. However, these formulas are in claim 1, from which claim 11 depends. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "2,4,6-trifluorophenyl" in definition of the phenyl at the 6position on the bicycle. However, claim 1, from which claim 11 depends does not allow for this
substitution. Thus, there is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- Ascertaining the differences between the prior art and the claims at issue.
- Resolving the level of ordinary skill in the pertinent art.
- Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tormo I Blasco et. al. (US 20060211711 A1).

The instant Application claims compounds of formula (I), wherein X= methoxy, $R^2=$ hydrogen, $R^1=$ CH₂CHCH and the phenyl at the 6-position of the bicyclic skeleton is 2,4-diffuoro-6-chlorophenyl.

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Tormo I Blasco et. al. teaches compounds of formula (I), wherein X= chloro, R^2 = hydrogen, R^1 = CH₂CHCH and the phenyl at the 6-position of the bicyclic skeleton is 2,4,6-trifluorophenyl. See page 10, Table 1, compound I-1.

The only difference between the claimed compound and the reference is a) the substitution of X, and b) the substitution at the phenyl ring at the 6-position of the bicycle.

- a) The substitution at X, Applicant's methoxy versus chloro. The genus on page 1 of the Specification of the copending Application teaches that the methoxy and chloro are alternatively useable, see page 1, paragraph 0008.
- b) The substitution of the phenyl ring at the 6-position of the bicycle, 6-fluoro versus 6-chloro. The genus on page 1 of the disclosure of the reference teaches that the chloro and fluoro are alternatively useable, see page 1, paragraph 0002. This is only one example found in the reference. Thus, said claims are obvious.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tormo I Blasco et. al. (US 20060211573 A1).

The instant Application claims compounds of formula (I), wherein X= cyano, $R^2=$ hydrogen, $R^1=$ CH₂CH₂ and the phenyl at the 6-position of the bicyclic skeleton is 2,4-difluoro-6-chlorophenyl.

Tormo I Blasco et. al. teaches compounds of formula (I), wherein X= chloro, R²= hydrogen, R¹= CH₂CH₂ and the phenyl at the 6-position of the bicyclic skeleton is 2,4,6-trifluorophenyl. See page 12, Table 1, compound I-3.

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The only difference between the claimed compound and the reference is a) the substitution of X, and b) the substitution at the phenyl ring at the 6-position of the bicycle.

- a) The substitution at X, Applicant's cyano versus chloro. The genus on page 1 of the Specification of the reference teaches that the cyano and chloro are alternatively uscable, see page 1, paragraph 0005.
- b) The substitution of the phenyl ring at the 6-position of the bicycle, 6-fluoro versus 6-chloro. The genus on page 1 of the Specification of the reference teaches that the chloro and fluoro are alternatively useable, see page 1, paragraph 0002. This is only one example found in the reference. Thus, said claims are obvious.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyahara et. al. (JP 2002308879 A).

The instant Application claims compounds of formula (I), wherein X= methyl, R²= hydrogen, R¹= isopropyl and the phenyl at the 6-position of the bicyclic skeleton is 2-chloro-4,6-difluorophenyl.

Miyahara et. al. teaches compounds of formula (I) as fungicides, wherein X= methyl, $R^2=$ hydrogen, $R^1=$ isopropyl and the phenyl at the 6-position of the bicyclic skeleton is 2-chloro-6-fluorophenyl. See compound 7, columns 63-64.

The only difference between the claimed compound and the reference is the substitution at the phenyl ring at the 4-position of the bicycle, a hydrogen versus 4-fluoro. The reference teaches a guidepost where the 4-position is a fluoro, see compound 10, columns 63-64. Thus, the

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hydrogen and fluoro are alternatively useable at the 4-position of the phenyl. This is only one example found in the reference. Thus, said claims are obvious.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmitt et. al. (US 7329663 B2).

The instant Application claims compounds of formula (I) as antifungals, wherein X= methyl, R^1 and $R^2=4$ -methylpiperidinyl and the phenyl at the 6-position of the bicyclic skeleton is 2-chloro-4,6-difluorophenyl.

The copending Application teaches compounds of formula (I) as antifungals, wherein X= methyl, R^1 and R^2 = 4-methylpiperidinyl and the phenyl at the 6-position of the bicyclic skeleton is 2-chloro-6-fluorophenyl. See column 71, example 107.

The only difference between the claimed compound and the reference is the substitution at the phenyl ring at the 6-position of the bicycle, hydrogen versus 4-fluoro. Schmitt teaches a guidepost where the substituent at the 4-position of the phenyl can be fluoro, see column 14, the last structure and column 26, lines 60-61. Furthermore, the genus in column 3 of the Specification of the reference teaches that the phenyl can be substituted, see column 4, line 35. This is only one specie which renders said claims obvious in the reference. Thus, said claims are rendered obvious by Schmitt et. al.

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Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pfrengle et. al. (US 5994360).

The instant Application claims compounds of formula (I) as antifungals, wherein X= methyl, R^1 and R^2 = $CH_2C(CH_3)(CH_2)_2$ and the phenyl at the 6-position of the bicyclic skeleton is 6-chloro-2,4-difluorophenyl.

Pfrengle et. al. teaches compounds of formula (I) as antifungals, wherein X= methyl, R^1 and R^2 = $CH_2C(CH_3)(CH_2)_2$ and the phenyl at the 6-position of the bicyclic skeleton is 6-chloro-2-fluorophenyl. See column 12, Table I, example 12.

The only difference between the claimed compound and the reference is the substitution at the phenyl ring at the 4-position of the bicycle, hydrogen versus 4-fluoro. Pfrengle teaches a guidepost where the substituent at the 4-position of the phenyl can be fluoro, see column 12, example 14. Furthermore, the genus in column 20f the Specification of the reference teaches that the phenyl can be substituted with a halogen anywhere on the phenyl, see column 2, line 27. This is only one specie which renders said claims obvious. Thus, said claims are rendered obvious by Schmitt et. al.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection

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is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(8) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(8). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 15-30 of copending Application No. 11661566. Although the conflicting claims are not identical, they are not patentably distinct from each other because the I-145 specie on page 67 only differs from the claimed compounds in the following manner:

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The instant Application claims compounds of formula (I), wherein X= methyl, R²= hydrogen, R¹= 1,1-dimethyl-2-hydroxyethyl and the phenyl at the 6-position of the bicyclic skeleton is 2.4-difluoro-6-chlorophenyl.

The copending Application teaches compounds of formula (I), wherein X = methyl, $R^2 = hydrogen$, $R^1 = 1,1$ -dimethyl-2-hydroxyethyl and the phenyl at the 6-position of the bicyclic skeleton is 2,4,6-trifluorophenyl.

The only difference between the claimed compound and the reference is the substitution at the phenyl ring at the 6-position of the bicycle, 6-fluoro versus 6-chloro. The genus on page 1 of the Specification of the copending Application teaches that the chloro and fluoro are alternatively useable, see page 2, lines 34-35. This is only one example found in the copending Application. Thus, said claims are obvious.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 11628852. Although the conflicting claims are not identical, they are not patentably distinct from each other because the 64th specie in Table C, on page 68, only differs from the claimed compounds in the following manner:

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The instant Application claims compounds of formula (I), wherein X= methoxy, $R^2=$ hydrogen, $R^1=2$ -(3-acetyl)propyl and the phenyl at the 6-position of the bicyclic skeleton is 2,4-difluoro-6-chlorophenyl.

The copending Application teaches compounds of formula (I), wherein X= chloro, $R^2=$ hydrogen, $R^1=2-(3-\text{acetyl})$ propyl and the phenyl at the 6-position of the bicyclic skeleton is 2,4,6-trifluorophenyl.

The only difference between the claimed compound and the reference is a) the substitution of X, and b) the substitution at the phenyl ring at the 6-position of the bicycle.

- a) The substitution at X, Applicant's methoxy versus chloro. The genus on page 1 of the Specification of the copending Application teaches that the methoxy and chloro are alternatively useable, see page 1, lines 28-29.
- b) The substitution of the phenyl ring at the 6-position of the bicycle, 6-fluoro versus 6-chloro. The genus on page 1 of the Specification of the copending Application teaches that the chloro and fluoro are alternatively useable, see page 2, lines 1-3. This is only one example found in the copending Application. Thus, said claims are obvious.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of copending Application No. 10594738. Although the conflicting claims are not identical, they are not patentably distinct

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from each other because the I-3 specie in Table 1, on page 23, meets the limitations of claim 1 in the instant Application.

Claims 1-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11 of copending Application No. 10550571. Although the conflicting claims are not identical, they are not patentably distinct from each other because the I-1 specie in Table 1, on page 25, only differs from the claimed compounds in the following manner:

The instant Application claims compounds of formula (I), wherein X= methoxy, R²= hydrogen, R¹= CH₂CHCH and the phenyl at the 6-position of the bicyclic skeleton is 2,4-difluoro-6-chlorophenyl.

The copending Application teaches compounds of formula (I), wherein X= chloro, R^2 = hydrogen, R^1 = CH₂CHCH and the phenyl at the 6-position of the bicyclic skeleton is 2,4,6-trifluorophenyl.

The only difference between the claimed compound and the reference is a) the substitution of X, and b) the substitution at the phenyl ring at the 6-position of the bicycle.

- a) The substitution at X, Applicant's methoxy versus chloro. The genus on page 1 of the Specification of the copending Application teaches that the methoxy and chloro are alternatively uscable, see page 1, line 26.
- b) The substitution of the phenyl ring at the 6-position of the bicycle, 6-fluoro versus 6chloro. The genus on page 1 of the Specification of the copending Application teaches that the

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chloro and fluoro are alternatively useable, see page 1, lines 10-11. This is only one example found in the copending Application. Thus, said claims are obvious.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of copending Application No. 10548690. Although the conflicting claims are not identical, they are not patentably distinct from each other because the I-1 specie in Table 1, on page 31, only differs from the claimed compounds in the following manner:

The instant Application claims compounds of formula (I), wherein X= cyano, $R^2=$ hydrogen, $R^1=$ CH₂CH₂ and the phenyl at the 6-position of the bicyclic skeleton is 2,4-difluoro-6-chlorophenyl.

The copending Application teaches compounds of formula (I), wherein X= chloro, R^2 = hydrogen, R^1 = CH_2CH_2 and the phenyl at the 6-position of the bicyclic skeleton is 2,4,6-trifluorophenyl.

The only difference between the claimed compound and the reference is a) the substitution of X, and b) the substitution at the phenyl ring at the 6-position of the bicycle.

a) The substitution at X, Applicant's cyano versus chloro. The genus on page 1 of the Specification of the copending Application teaches that the cyano and chloro are alternatively useable, see page 1, line 17.

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b) The substitution of the phenyl ring at the 6-position of the bicycle, 6-fluoro versus 6-chloro. The genus on page 1 of the Specification of the copending Application teaches that the chloro and fluoro are alternatively useable, see page 1, lines 10-11. This is only one example found in the copending Application. Thus, said claims are obvious.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUSANNA MOORE whose telephone number is (571)272-9046. The examiner can normally be reached on M-F 8:00-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Wilson can be reached on (571) 272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Susanna Moore/ Examiner, Art Unit 1624

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